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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,678	01/16/2002	Jurgen Konrad	4478-6PUS	2331

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EXAMINER

WANG, TED M

ART UNIT	PAPER NUMBER
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2634

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DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/807,678

Applicant(s)

KONRAD, JURGEN

Examiner

Ted M Wang

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-15 are pending in the application.

#### *Preliminary Amendment*

2. The preliminary amendment, paper # 6, filed on 1/16/2002 has been entered.  
Applicant cancels Claims 1-7 and adds Claims 8-15.

#### *Drawings*

3. The drawings are objected to because
  - Reference number "1" next to Channel switch box in Fig.1 should be deleted.
  - Reference number "43" should be changed to "45".

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: **Reference number 10 in Fig.1**. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

5. The disclosure is objected to because of the following informalities:
- Paper # 6, filed on 1/16/2002, page 27 line 19, "(step SA)" should be changed to "step SA1".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 8, 11, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Deman et al. (US4,554,668).

- In regard claim 8, Deman et al. discloses a frequency-hopping radio communications system having a plurality of transceivers (column 1 line 63 – column 2 line 11, and column 5 lines 19-46), wherein each of said plural transceivers comprises:

a transmitting section for conditioning input data for transmission of said input data over the communication link having the plurality of channels (Fig.1 and 2 and column 5 line 10 – column 7 line 50); a receiving section for receiving signals from one of the plural channels of the communication link and processing the signals into output data (Fig.1 and 2 and column 5 line 10 – column 7 line 50); a channel switching device connected to said transmitting section and said receiving section (Fig.2 elements 118 and 218, and column 8 lines 24-45); a channel hopping sequence program part including a plurality of channel hopping sequences programmed therein, said plural channel hopping sequences including a channel hopping sequence associated with said each of said plural transceivers (Fig.1 elements 108 and 208 and Fig.2 element 108, 116, 208, and 216, and column 7 line 62 – column 8 line 45); a channel selecting device connected to said channel switching device and said channel hopping sequence program part for controlling said channel switching device in accordance with one of said plural channel hopping sequences (column 1 line 63 – column 2 line 11, and claim 1); and a clock device connected for operating said channel selecting device, said clock device being synchronized by a public time signal for synchronizing channel hopping between a transmitting one of said plural transceivers and a receiving one of said plural transceivers (Fig.1 and 2 elements 107, 113, and 207, and column 5 lines 19-46), wherein each of said plural transceivers comprises a

unique identification number defining the channel hopping sequence associated with said each of said plural transceivers (column 8 lines 24-45), said unique identification number of the transmitting one of said plural transceivers being transmittable by said transmitting one of said plural transceivers and receivable by the receiving one of said plural transceivers for identification by the receiving one of said plural transceivers of the one of said plural channel hopping sequences associated with the transmitting one of said plural transceivers to used for a connection setup between said transmitting one and said receiving one of said plural transceivers (column 7 lines 51 – column 9 line 8).

- In regard claim 11, the limitation of plural channel hopping sequences in said channel hopping sequence program part comprise all possible channel hopping sequences useable by said system can further be taught in column 5 line 10 – column 7 line 50.
- In regard claim 13, which is an apparatus claim related to claim 8, all limitation is contained in claim 8. The explanation of all the limitation is already addressed in the above paragraph.
- In regard claim 14, which is a data transfer device claim related to claim 8, all limitation is contained in claim 8. The explanation of all the limitation is already addressed in the above paragraph.

Art Unit: 2634

- In regard claim 15, which is a method claim related to claim 8, all limitation is contained in claim 8 and column 7 line 32 – column 9 line 29. The explanation of all the limitation is already addressed in the above paragraph.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deman et al. (US4,554,668) in view of Smith (US4,850,036).

- In regard claim 12, Deman et al. discloses all of the limitation as described in the above paragraph except specifically teaching that plural channel hopping sequences are calculated from an algorithm.

Smith discloses a radio communication system using synchronous frequency hopping transmissions that plural channel hopping sequences are calculated from an algorithm (column 4 lines 4-13, column 5 lines 20-54, and column 7 line 51 – column 9 line 63) in order to facilitate system design or make system design more flexible.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Deman's frequency-hopping radio communications system in

view of smith's disclosure in order to facilitate system design or make system design more flexible.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- In regard claim 9, "clock device comprises a clock for generating an operating clock signal for the channel selecting device, said clock signal having a frequency within the range including **100 kHz to 10MHz** " as cited has not been taught by the applicant in the specification. Instead, the applicant teaches "The clock 26 can feed a high-frequency signal (**one megahertz**) to the channel selection circuit 20 which then feeds a corresponding control signal to the channel switch 10." as cited in page 25 lines 18-20, pre-amendment paper # 6, filed on 1/16/2002.



- Claim 10 is objected to because of the following informalities: Claim 10 is being improperly depended on claim 8. The term "said frequency" as cited in claim 10 has no relationship with claim 8. Appropriate correction is required.

**Conclusion**

12. Reference US6,032,049 and US5,537,434 are cited because they are put pertinent to the frequency hopping two-way radio communication system. However, none of references teach detailed connection as recited in claim.

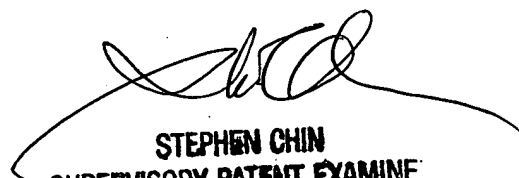
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M Wang whose telephone number is (703) 305-0373. The examiner can normally be reached on 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Chin can be reached on (703) 305-4714. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Ted M Wang  
Examiner  
Art Unit 2634

Ted M. Wang

  
**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINEE**  
**TECHNOLOGY CENTER 2600**